

What is claimed is:

1. A two-way dispatching method of manufacturing IC, while a plurality of lots of wafers with a plurality of priorities are manufactured in a process by a plurality of equipments, used to determine a dispatching order in a plurality of workstations, wherein the process is composed of a plurality of stages, and the stages are composed of a plurality of workstations, the two-way dispatching method of manufacturing IC comprising:

performing a first push step, a first lot of wafers with a compulsory order is dispatched into the workstations, wherein the first lot of wafers is included in the lots of wafers;

calculating a plurality of first capacities and a plurality of first deficiencies of the equipments;

performing a first pull step, if amount of lots of wafers manufactured in a first stage of the stages is not filled to a first full load and has a first vacancy, then a second lot of wafers having the same amount as the first vacancy of the first stage is dispatched to a second stage, in front of the first stage, wherein the second lot of wafers is included in the lots of wafers;

calculating a plurality of capacities and a plurality of second deficiencies of the equipments;

performing a second pull step, if amount of lots of wafers manufactured in a first workstation of the workstation s is not filled to a second full load and has a second vacancy, then a third lot of wafers having the same amount as the second vacancy of the first workstation is dispatched to a second workstation, in front of the first workstation, wherein the first workstation and the second workstation are in the same

stage, and the third lot of wafers are included in the lots of wafers;

calculating a plurality of capacities and a plurality of third deficiencies of these equipments; and

performing a second push step, dispatching the lots of wafers into the
5 workstations, which is not filled the second full load.

2. The two-way dispatching method of manufacturing IC of claim 1, wherein
the first lots of wafers with the compulsory order comprising: lots of wafers with a
special priority, delay lots of wafers, and idle lots of wafers affecting manufacturing
10 IC.

3. The two-way dispatching method of manufacturing IC of claim 1, wherein
the second lots of wafers has the same amount of the first vacancy.

15 4. The two-way dispatching method of manufacturing IC of claim 1, wherein
the third lots of wafers has the same amount of the second vacancy.

5. The two-way dispatching method of manufacturing IC of claim 1, wherein
the second stage is next to the first stage.

20 6. The two-way dispatching method of manufacturing IC of claim 1 further
comprising: repeating the first pull step, dispatching from the second stage to the first
one of the stages.

7. The two-way dispatching method of manufacturing IC of claim 6, wherein the first stage is the last one of the stages.

5 8. The two-way dispatching method of manufacturing IC of claim 1, wherein the second workstation is next to the first workstation.

9. The two-way dispatching method of manufacturing IC of claim 8 further comprising: repeating the second pull step, dispatching from the second workstation
10 of the stages to the first one of the workstation of the stages.

10. The two-way dispatching method of manufacturing IC of claim 9, wherein the first workstation is the last one of the workstation.

15 11. A two-way dispatching method of manufacturing IC, while a plurality of lots of wafers with a plurality of priorities are manufactured in a process by a plurality of equipments, uses to determine a dispatching order in a plurality of work units, wherein the process is composed of the work units, the two-way dispatching method of manufacturing IC comprising:

20 performing a first push step, a first lots of wafers with a compulsory order is dispatched into these workstation, wherein the first lot of wafers is comprised in the lots of wafers;

calculating a plurality of first capacities and a plurality of first deficiencies of

these equipments;

performing a pull step, if a mount of lots of wafers manufactured in a first work unit of the work units is not filled to a first full load and has a first vacancy, then a second lot of wafers having the same amount as the first vacancy of the first work units is dispatched to a second work units, in front of the first work unit, wherein the second lot of wafers is included in the lots of wafers;

calculating a plurality of capacities and a plurality of second deficiencies of these equipments; and

performing a second push step, dispatching the lots of wafers into the work units, which is not filled the second full load.

12. The two-way dispatching method of manufacturing IC of claim 11, wherein the first lot of wafers with the compulsory order comprises: lots of wafers with a special priority, delay lots of wafers, and idle lots of wafers affecting manufacturing IC.

13. The two-way dispatching method of manufacturing IC of claim 11, wherein the second lot of wafers has the same amount of the first vacancy.

14. The two-way dispatching method of manufacturing IC of claim 11, wherein the second work unit is next to the first work unit.

15. The two-way dispatching method of manufacturing IC of claim 1 further

comprising: repeating the pull step; and dispatching from the second work unit to the first one of the work unit.

16. The two-way dispatching method of manufacturing IC of claim 15,
5 wherein the first work unit is the last one of the work units.

17. A dispatching method of wafers of manufacturing IC, while a plurality of
lots of wafers are manufactured in a process in a plurality of workstations of a
plurality of stages by a plurality of equipments, the dispatching method of wafers of
10 manufacturing IC comprising:

providing a database, wherein the database has a plurality of process data of
the lots of wafers of the workstations;

determining a plurality of lots of wafers by using the process data;

gathering a plurality of capacity limits of the equipments from a capacity
15 scheme system;

gathering a plurality of standard amount of wafers which can be manufactured
in the equipments according to the capacity scheme system;

calculating a plurality of deficiencies of the equipments by the standard
amount of wafers;

20 Performing the two-way dispatching method to dispatch the lots of wafers by
the priorities, the capacity limits of the equipments, and the deficiencies of the
equipments, the two-way dispatching method comprising:

performing a first push step;

performing a first pull step;
performing a second pull step;
performing a second push step; and
printing a dispatching list according to the result of the two-way

5 dispatching method.

18. The dispatching method of wafers of manufacturing IC of claim 17,
wherein the first push step further comprises: a first lots of wafers with a compulsory
order dispatched into these workstation, wherein the first lot of wafers is included in
10 the lots of wafers.

19. The dispatching method of wafers of manufacturing IC of claim 17,
wherein the first lot of wafers with the compulsory order comprises: lots of wafers
with a special priority, delay lots of wafers, and idle lots of wafers affecting
15 manufacturing IC.

20. The dispatching method of wafers of manufacturing IC of claim 17,
wherein the first pull step further comprises: if a mount of lots of wafers manufactured
in a first stage of the stages is not filled to a first full load and has a first vacancy,
20 dispatching a second lot of wafers having the same amount as the first vacancy of the
first stage to a second stage, in front of the first stage, wherein the second lot of wafers
comprises included in the lots of wafers.

21. The dispatching method of wafers of manufacturing IC of claim 20,

wherein the second lots of wafers has the same amount as the first vacancy.

22. The dispatching method of wafers of manufacturing IC of claim 20, wherein the second stage is next to the first stage.

5

23. The dispatching method of wafers of manufacturing IC of claim 20 further comprising: repeating the first pull step; and dispatching from the second stage to the first one of the stages.

24. The dispatching method of wafers of manufacturing IC of claim 20, wherein the first stage is the last one of the stages.

25. The dispatching method of wafers of manufacturing IC of claim 17, wherein the second pull step further comprises: if a mount of lots of wafers manufactured in a first workstation of the workstation s is not filled to a second full load and has a second vacancy, dispatching a third lot of wafers having the same amount as the second vacancy of the first workstation to a second workstation, in front of the first workstation, wherein the first workstation and the second workstation are in the same stage, and the third lot of wafers comprises included in the lots of wafers.

15
20

26. The dispatching method of wafers of manufacturing IC of claim 17, wherein the third lot of wafers has the same amount of the second vacancy.

27. The dispatching method of wafers of manufacturing IC of claim 17, wherein the second workstation is next to the first workstation.

28. The dispatching method of wafers of manufacturing IC of claim 17
5 further comprising: repeating the second pull step and dispatching from the second workstation of the stages to the first one of the workstation of the stages.

29. The dispatching method of wafers of manufacturing IC of claim 17,
wherein the second pull step further comprises: dispatching the lots of wafers into the
10 workstations, which are not filled with the second full load.